Appln. No. 10/565,079

Amdt. dated April 16, 2010

Reply to Office action of December 17, 2009

Amendments to the Claims:

This listing of the claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A device for counting fine particles comprising, a transparent lower substrate having fine lattice patterns for counting the fine particles on an upper surface thereof; and

a transparent <u>unitary</u> upper substrate stacked on the lower substrate,
wherein the upper substrate comprises a <u>fill chamber-recess formed in having a</u>

predetermined height from a bottom surface of the upper substrate; and forming a

space for filling a sample including the fine particles on the fine lattice patterns and

a fill chamber formed by said recess and said transparent lower substrate

when the substrates are stacked together; and

an injecting hole <u>formed on an upper surface of said upper substrate</u>

leading into the recess for injecting the sample communicated with into the fill chamber,

wherein an area of the fill chamber in the upper and lower substrates is transparent for a microscopic observation; and the fine lattice patterns are formed in a predetermined place of the area in which the fill chamber is formed on the lower substrate,

wherein the fine lattice patterns are positive grids which are embossed on the upper surface of the lower substrate,

Appln. No. 10/565,079 Amdt. dated **April 16, 2010**

Reply to Office action of December 17, 2009

wherein the upper and lower substrates are directly bonded and thus form an integrated body.

2. (Original) The device according to claim 1, wherein the upper substrate further comprises a discharge hole communicated with the fill chamber for discharging the sample or an air bubble from the fill chamber.

3. (Canceled)

- 4. (**Original**) The device according to claim 3, wherein the upper and lower substrates are bonded by a heating, an adhesive, a coating, a pressurization, a vibration or an ultrasonic bonding.
- 5. (Original) The device according to claim 1, wherein the fill chamber is formed with a height of 50-200 μm .

6. (Canceled)

- 7. **(Original)** The device according to claim 1, wherein an indicative member is formed on the upper substrate for indicating a position of the fine lattice patterns.
- 8. (Previously Presented) The device according to claim 1, wherein the upper or lower substrate is made of one of plastics, polycarbonate (PC), polymethylmethacrylate (PMMA), polyethylene (PE), polyethyleneterephthalate (PET) or polystyrol (PS).
- 9. (Original) The device according to claim 1, wherein the fine particles are blood cells or bacteria.

Appln. No. 10/565,079 Amdt. dated **April 16, 2010**

Reply to Office action of December 17, 2009

10. (Withdrawn) A manufacturing method of a device according to claim 1 comprising steps of;

forming fine lattice patterns on a predetermined place of a lower substrate, wherein the fine lattice patterns are positive grids which are embossed on the lower substrate;

forming a fill chamber having a predetermined height for filling a sample including the fine particles, an injecting hole and a discharge hole communicated with the fill chamber in an upper substrate; and

bonding the upper and lower directly, wherein the upper and lower substrates are an integrated body, wherein

an area of the fill chamber in the upper and lower substrates is transparent for a microscopic observation and the fine lattice patterns are formed in a predetermined place of the area in which the fill chamber is formed on the lower substrate.

11. (Withdrawn) The method according to claim 10, wherein the step of forming fine lattice patterns on a predetermined place of the lower substrate comprising steps of:

forming a photoresist layer on a plate;

forming a mask pattern having fine lattice patterns on the plate by patterning the photoresist layer;

etching the plate by using the mask pattern as an etching mask;

Appln. No. 10/565,079

Amdt. dated April 16, 2010

Reply to Office action of December 17, 2009

removing the mask pattern to obtain the plate as a mold wherein the fine lattice patterns are formed;

pouring melted plastics on the mold, and then cooling and curing the plastics on the mold; and

removing the mold to obtain the plastics as the lower substrate wherein the fine lattice patterns are formed.

12. **(Withdrawn)** The method according to claim 10, wherein the step of forming fine lattice patterns on a predetermined place of the lower substrate comprising steps of:

forming a photoresist layer on a plate;

forming a mask pattern having fine lattice patterns on the plate by patterning the photoresist layer;

etching the plate by using the mask pattern as an etching mask;

removing the mask pattern to obtain the plate as a master wherein the fine lattice patterns are formed; forming Ni layer on the master by electroless plating or electrolysis plating;

removing the master to obtain the Ni layer as a mold wherein the fine lattice patterns are formed; pouring melted plastics on the mold, and then cooling and curing the plastics on the mold; and removing the mold to obtain the plastics as the lower substrate wherein fine lattice patterns are formed.